PATENT-2062.CA

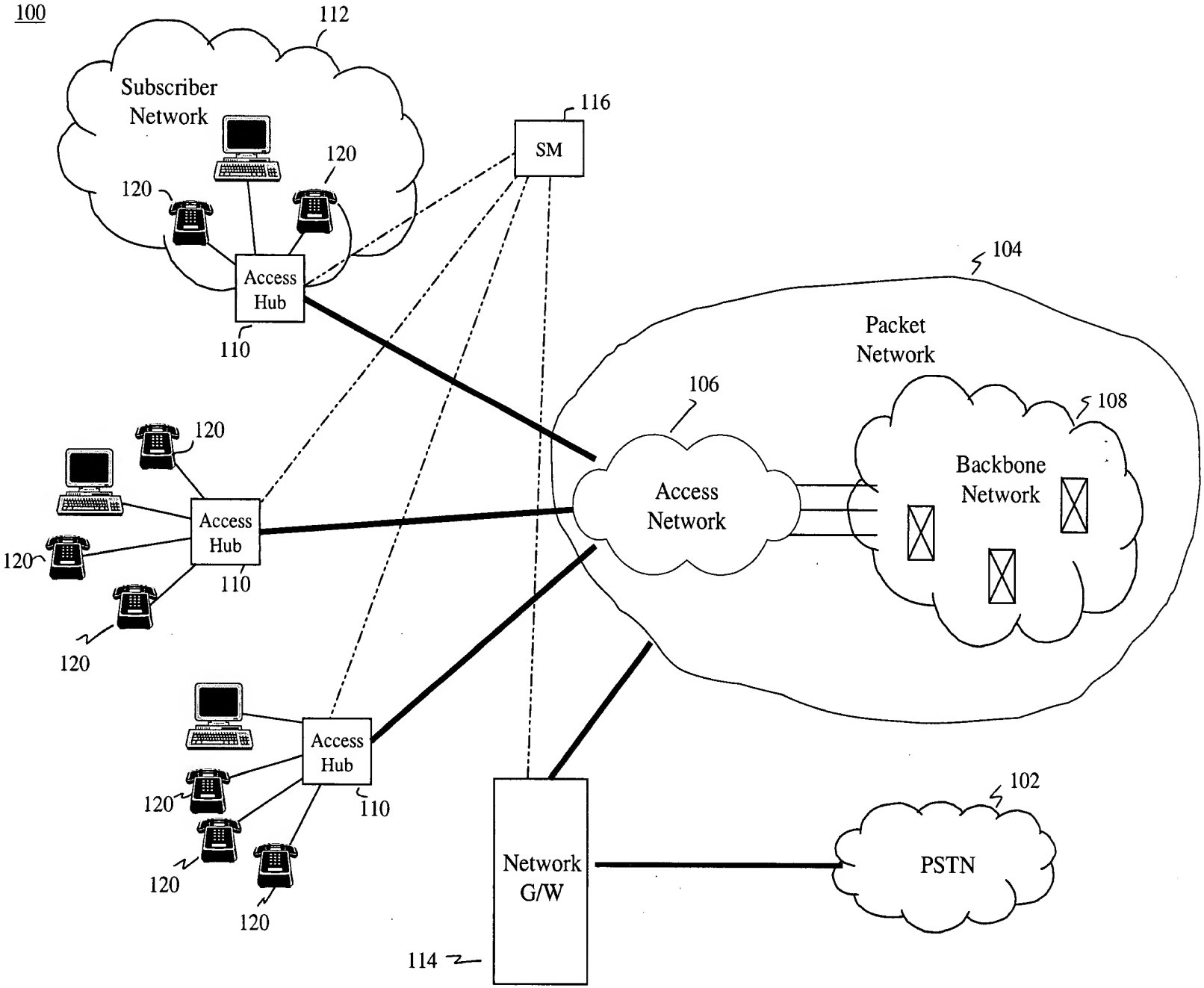

FIGURE 1 PRIOR ART

PCT/US2002/020760

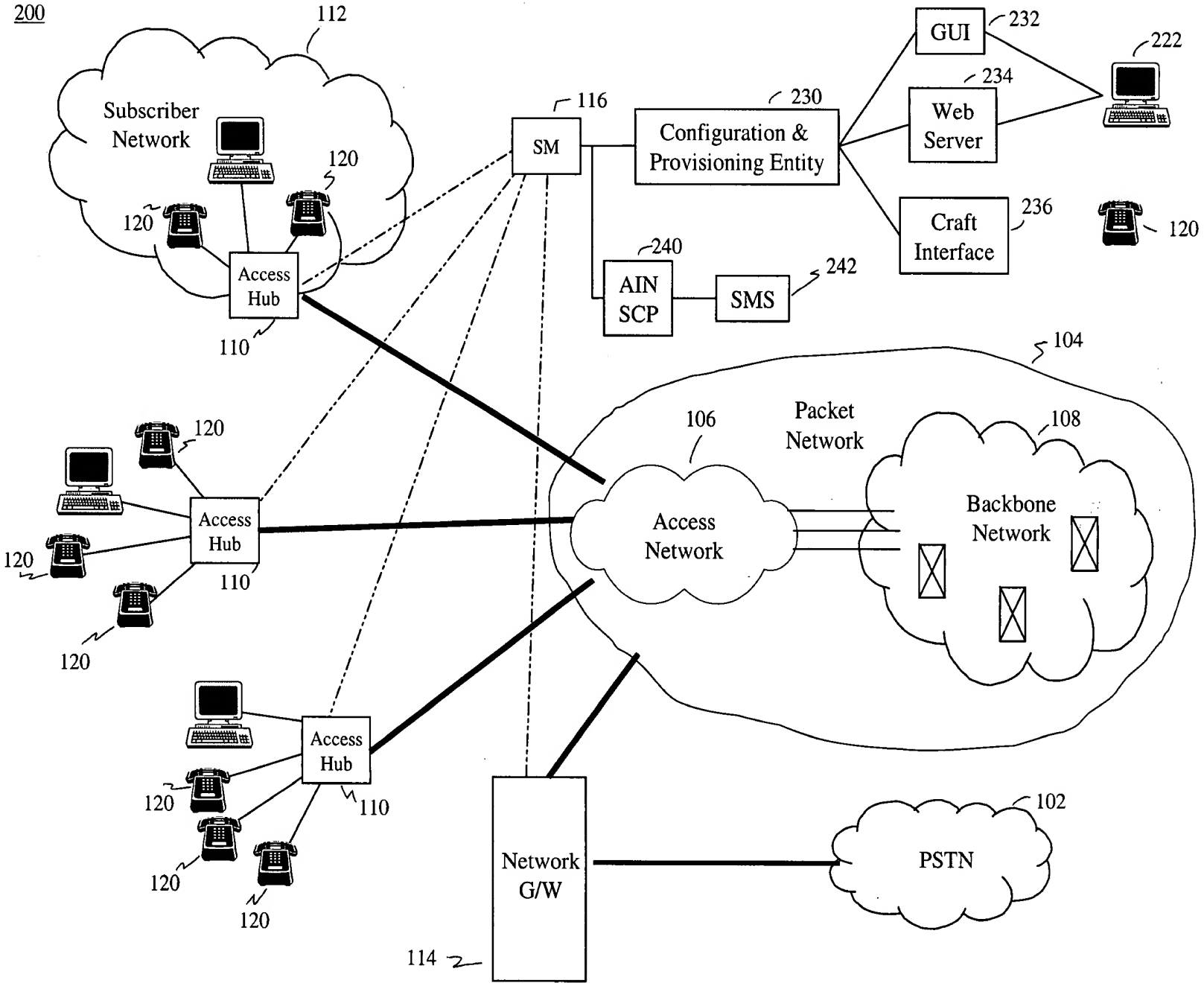

FIGURE 2

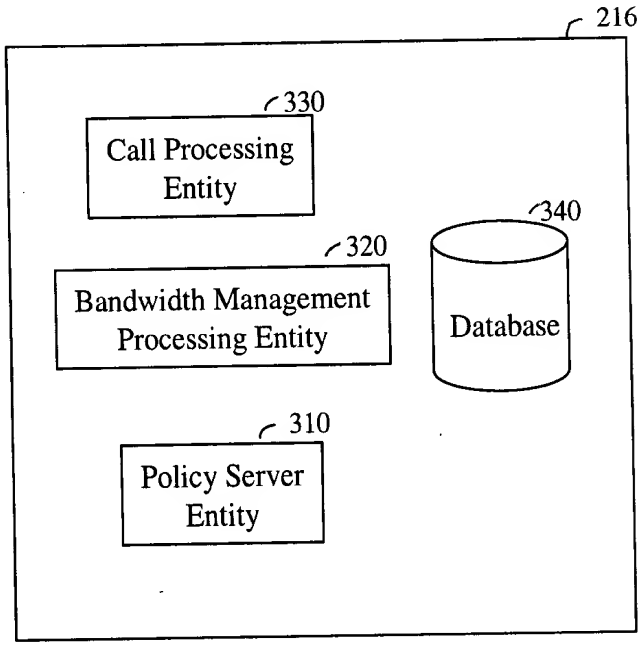
216
330
Call Processing Entity
340
320
Bandwidth Management Processing Entity
Database
310
Policy Server Entity

FIGURE 3

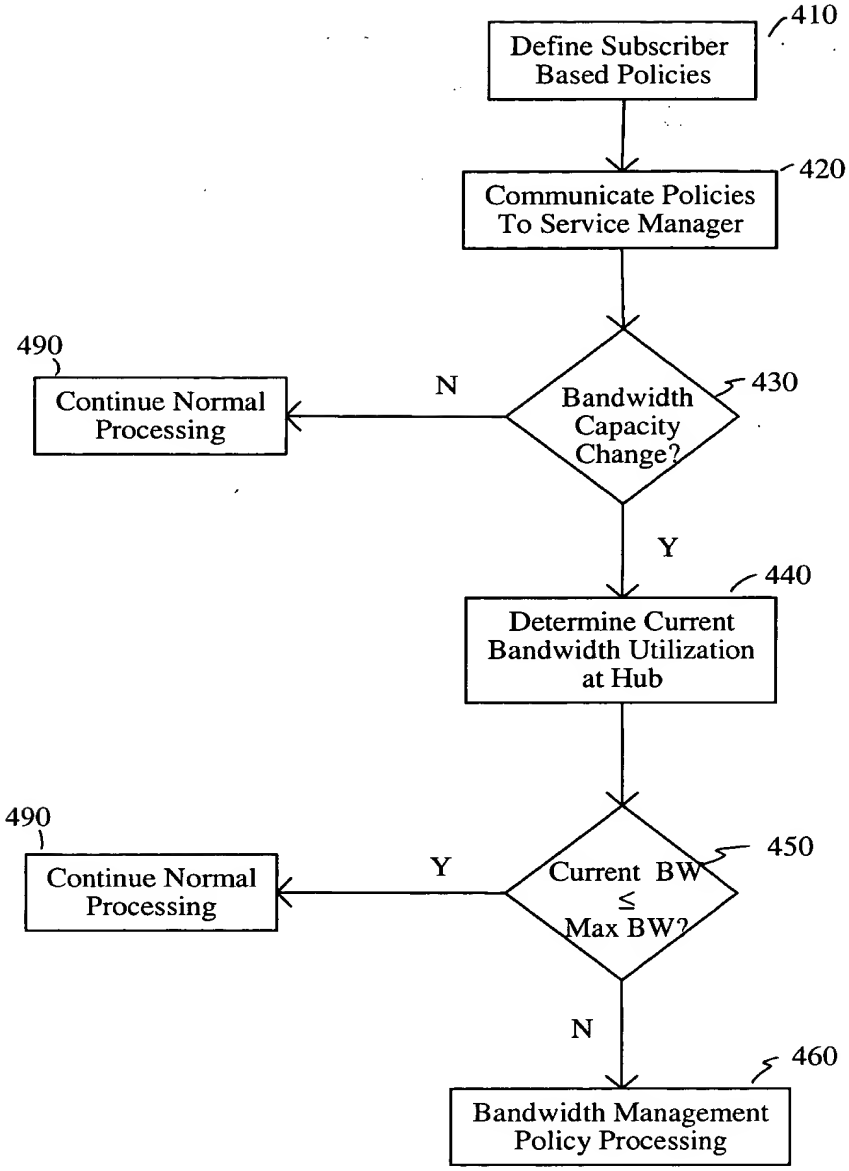
Define Subscriber Based Policies
410
Communicate Policies To Service Manager
420
Bandwidth Capacity Change?
430
N
490
Continue Normal Processing
Y
Determine Current Bandwidth Utilization at Hub
440
Current BW ≤ Max BW?
450
Y
490
Continue Normal Processing
N
Bandwidth Management Policy Processing
460

FIGURE 4

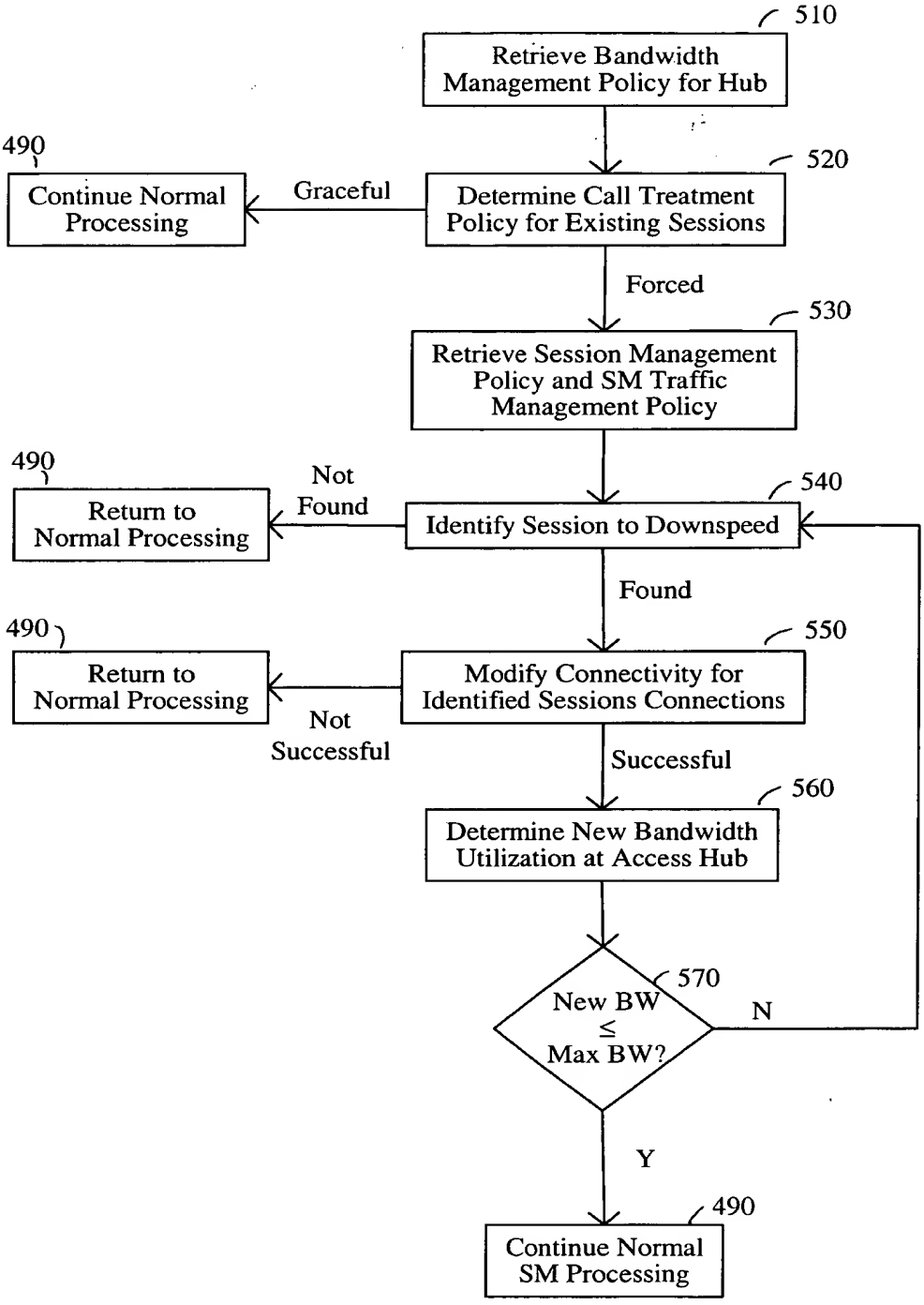
510
Retrieve Bandwidth Management Policy for Hub
490
Continue Normal Processing
Graceful
520
Determine Call Treatment Policy for Existing Sessions
Forced
530
Retrieve Session Management Policy and SM Traffic Management Policy
490
Return to Normal Processing
Not Found
540
Identify Session to Downspeed
Found
490
Return to Normal Processing
Not Successful
550
Modify Connectivity for Identified Sessions Connections
Successful
560
Determine New Bandwidth Utilization at Access Hub
570
New BW ≤ Max BW?
N
Y
490
Continue Normal SM Processing

FIGURE 5

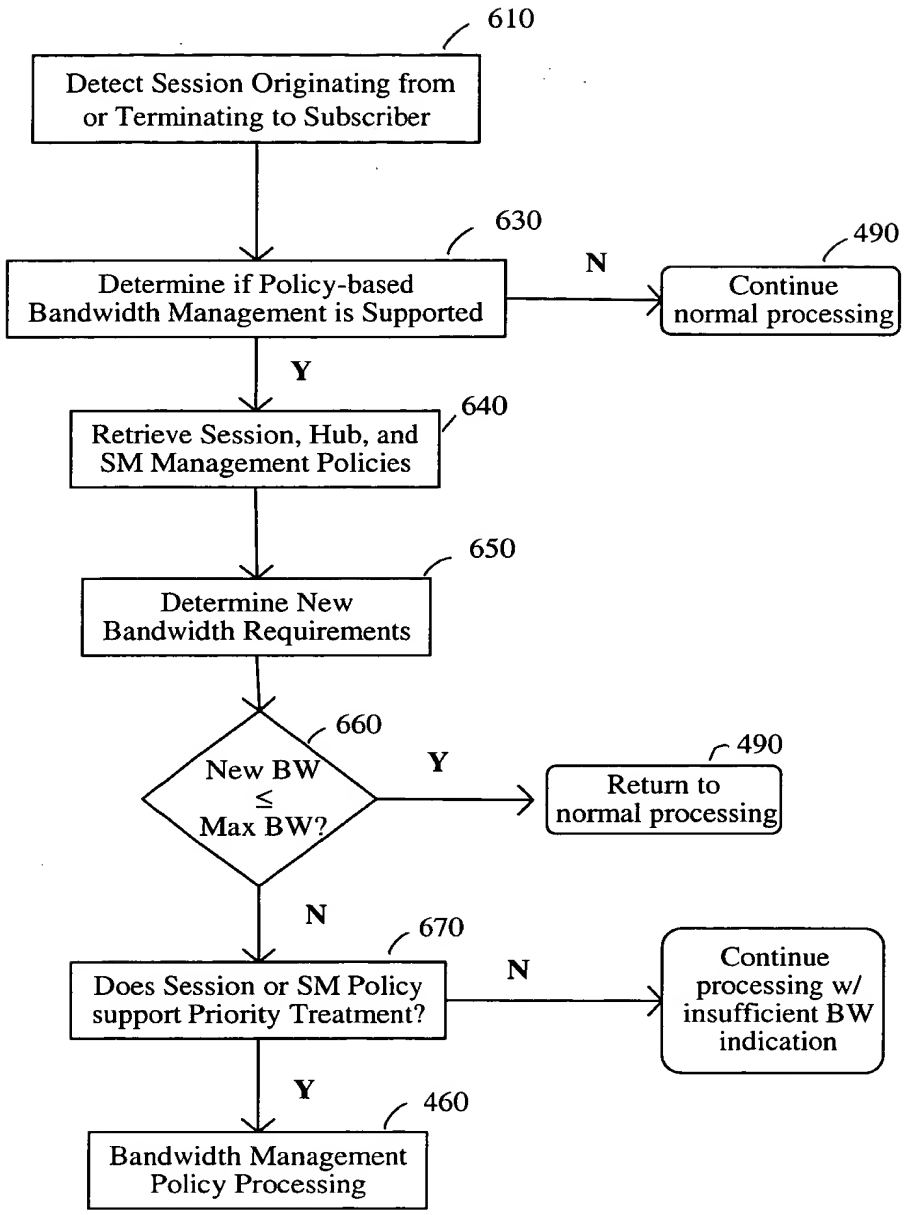
610
Detect Session Originating from or Terminating to Subscriber
630
Determine if Policy-based Bandwidth Management is Supported
N
490
Continue normal processing
Y
640
Retrieve Session, Hub, and SM Management Policies
650
Determine New Bandwidth Requirements
660
New BW ≤ Max BW?
Y
490
Return to normal processing
N
670
Does Session or SM Policy support Priority Treatment?
N
Continue processing w/ insufficient BW indication
Y
460
Bandwidth Management Policy Processing

FIGURE 6

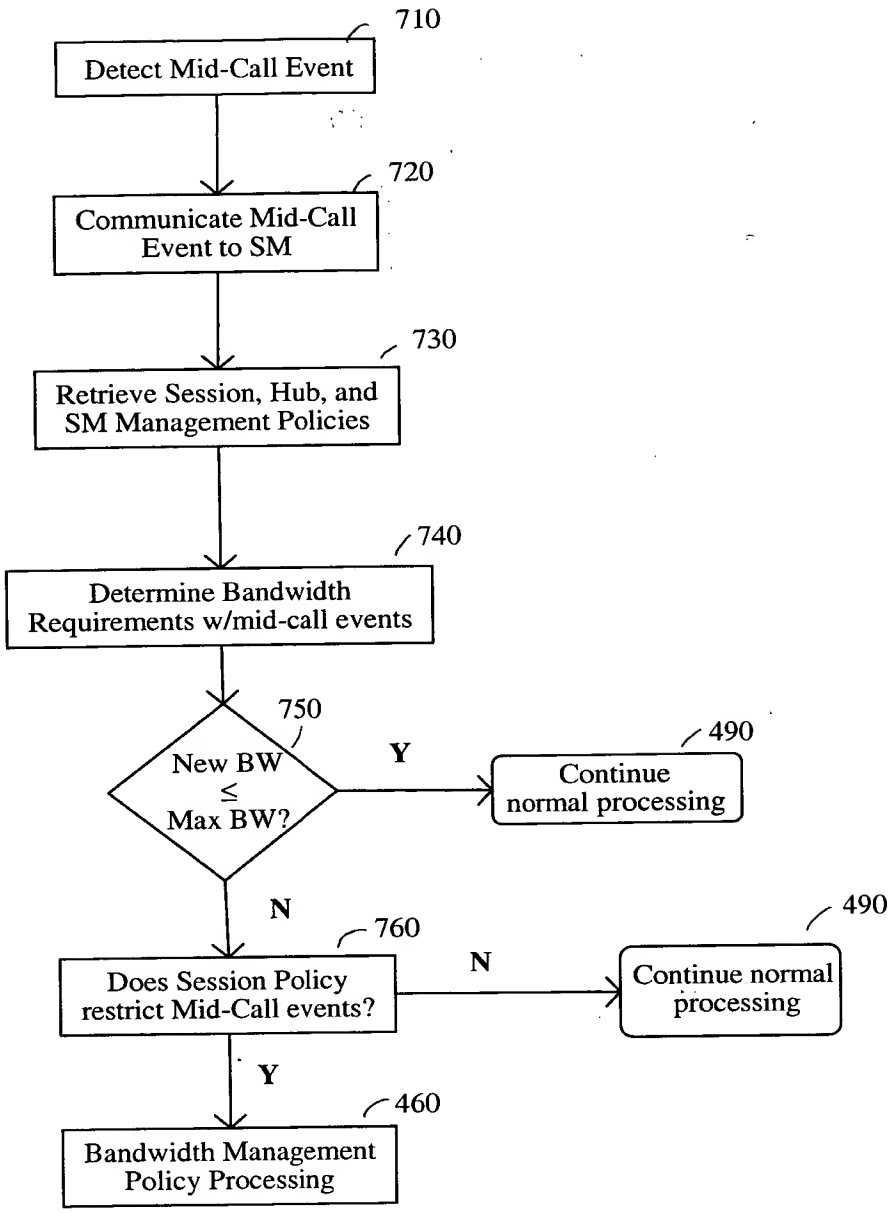
710
Detect Mid-Call Event
720
Communicate Mid-Call Event to SM
730
Retrieve Session, Hub, and SM Management Policies
740
Determine Bandwidth Requirements w/mid-call events
750
New BW ≤ Max BW?
Y
490
Continue normal processing
N
760
Does Session Policy restrict Mid-Call events?
N
490
Continue normal processing
Y
460
Bandwidth Management Policy Processing

FIGURE 7